

IN THE UNITED STATES DISTRICT COURT  
MIDDLE DISTRICT OF TENNESSEE  
NASHVILLE DIVISION

E.I. DU PONT DE NEMOURS AND	)	
COMPANY	)	
v.	)	NO. 3:03-848
	)	JUDGE CAMPBELL
CARDINAL HEALTH, INC., ET AL	)	

MEMORANDUM

The Court held a Markman hearing on August 2, 2005. Plaintiff E.I. Du Pont De Nemours and Company (“Dupont”) asserts that Defendants BBA U.S. Holdings, Inc. and BBA Nonwovens Simpsonville, Inc. (collectively “BBA”) have infringed a patent owned by Dupont. The patent at issue is U.S. Patent No. 5,885,909 (the “‘909 Patent”). The Court construes the disputed claim terms of the ‘909 Patent as set forth herein.

BACKGROUND FACTS

The ‘909 Patent issued on March 23, 1999 and relates to a nonwoven fabric that is both breathable while having excellent liquid barrier properties and is commonly used in medical applications such as surgical drapes and gowns (Docket No. 174, Ex. 1). Dupont asserts that BBA sells a fabric that it manufactures for Cardinal Health 200, Inc. (“Cardinal”) which infringes Claim 64 of the ‘909 Patent (Docket No. 171 at 10). Claim 64 is a dependent claim and depends from either independent Claim 4 or 5 of the ‘909 Patent (Docket No. 171 at 10). The BBA product that Dupont accuses of infringement is a custom product that BBA makes for Cardinal. Cardinal uses the custom fabric to make surgical gowns (Docket No. 176 at 7).

Dependent Claim 64 of the ‘909 Patent reads as follows:

Claim 64:

The sheet material according to any of Claims 1, 3, 4, 5, 6, and 7 wherein the material has

a cross sectional void percentage of at least about 85 percent.

Independent Claims 4 and 5 of the '909 Patent read as follows:

Claim 4:

A flexible sheet material having a Frazier permeability of at least about 15 m<sup>3</sup>/min-m<sup>2</sup> and a hydrostatic head of at least about 40 cm.

Claim 5:

A flexible sheet material having a combination of Frazier permeability and hydrostatic head properties selected from the group of:

a Frazier permeability of at least 70 m<sup>3</sup>/min-m<sup>2</sup> and an unsupported hydrostatic head of at least about 15 cm;

a Frazier permeability of at least 28 m<sup>3</sup>/min-m<sup>2</sup> and an unsupported hydrostatic head of at least about 30cm;

a Frazier permeability of at least 15 m<sup>3</sup>/min-m<sup>2</sup> and an unsupported hydrostatic head of at least about 40 cm; and

a Frazier permeability of at least 1 m<sup>3</sup>/min-m<sup>2</sup> and an unsupported hydrostatic head of at least about 80 cm.

(Docket No. 174, Ex. 1).

The following are the disputed claim terms of the '909 Patent and the parties proposed construction thereof:

#### 1. FLEXIBLE SHEET MATERIAL.

Dupont's proposed construction: "A broad, relatively thin surface, layer or covering that is capable of being easily bent without rupturing or breaking."

(Docket No. 171 at 26).

BBA's and Cardinal's proposed construction: "A single sheet of material that is easily bent, It cannot cover a multi-layer composite such as SMS."

(Docket No. 176 at 11, Docket No. 317).

## 2. FRAZIER PERMEABILITY.

Dupont's proposed construction: "A measurement of the ease with which air passes through material (based upon the rate of flow of air per unit area of fabric) at a specified pressure drop, typically performed according to ASTM D737 and IST 70.1, which are substantially similar standards."

(Docket No. 171 at 26).

BBA's and Cardinal's proposed construction: BBA and Cardinal assert that the term "Frazier permeability" is indefinite. In the alternative, BBA and Cardinal argue for a construction of the term as requiring "the accused product to meet the claimed measurement under all test protocols while using all test instruments."

(Docket No. 176 at 11 and 16, Docket No. 318 at 11 and Docket No. 170).

## 3. HYDROSTATIC HEAD.

Dupont's proposed construction: "A measurement of the resistance of fabrics to the penetration of water under hydrostatic pressure, typically performed according to AATCC 127, IST 80.4, and IST 80.6, which are substantially similar standards."

(Docket No. 171 at 26).

BBA's and Cardinal's proposed construction: BBA and Cardinal assert that the term "Hydrostatic Head" is indefinite. In the alternative, BBA and Cardinal argue for a construction

of the claim limitation as referring to “all test instruments using all test protocols.”

(Docket No. 176 at 17-18, Docket No. 170).

#### 4. AT LEAST ABOUT.

Dupont’s proposed construction: Dupont has adopted BBA’s and Cardinal’s alternative proposed construction of “at least .05 below the claimed number.”(Docket No. 370).

BBA’s and Cardinal’s proposed construction: BBA and Cardinal asserts the term “At least about” is indefinite. In the alternative, BBA and Cardinal argue for a construction of the term as follows: “At least .05 below the claimed number.”

(Docket No. 176 at 18-21 and Docket No. 170).

#### 5. CROSS-SECTIONAL VOID PERCENTAGE.

Dupont’s proposed construction: “A measurement of the porosity of a cross section (i.e., a cutting or piece cut off at right angles to an axis) of the material, equal to the volume of voids (or air space) in the cross section of the material structure divided by the total volume of the cross section of the material and multiplied by 100.

(Docket No. 171 at 27).

BBA’s and Cardinal’s proposed construction: BBA and Cardinal both assert that the term “cross-sectional void percentage” is indefinite, but agree with Dupont about what the plain meaning of the phrase means.

(Docket No. 176 at 24 and Docket No. 170).

### ANALYSIS

A determination of patent infringement is a two step analysis. First, the scope and meaning of the asserted claims are determined. Cybor Corp. v. FAS Technologies, Inc., 138 F.

3d 1448, 1454 (Fed. Cir. 1998) (citing Markman v. Westview Instruments, Inc., 517 U.S. 370, 116 S. Ct. 1384, 134 L. Ed. 2d 577 (1996)). Next, the construed claims are compared to the allegedly infringing device. Id. Claim construction is a matter of law for the Court to decide. Id.

“It is a ‘bedrock principle’ of patent law that ‘claims of a patent define the invention to which the patentee is entitled the right to exclude.’” Phillips v. AWH Corp., 415 F. 3d 1303, 1312 (Fed. Cir. 2005) (quoting Innova/Pure Water, Inc. v. Safari Water Filtration Systems, Inc., 381 F. 3d 1111, 1116 (Fed. Cir. 2004)). Generally, words in a claim are given their ordinary and customary meaning. Vitronics v. Conceptronic, Inc., 90 F. 3d 1576, 1582. The ordinary and customary meaning of a claim term is the meaning that would be attributed to those words by persons skilled in the relevant art in question at the time of the invention. Innova, 381 F. 3d at 1116. In some instances, the ordinary and customary meaning of a claim term is readily understood, and “claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words.” Phillips, 415 F. 3d at 1314, (quoting Brown v. 3M, 265 F. 3d 1349, 1352 (Fed. Cir. 2001)). “In such circumstances, general purpose dictionaries may be helpful.” Id. Many times, however, understanding the ordinary and customary meaning of the claim term in a field of art requires more elaborate interpretation. Id.

In interpreting a claim term, the Court may consider both intrinsic and extrinsic evidence. Vitronics, 90 F. 3d at 1582. Generally, the best sources available to the public to show what a person of skill in the art would have understood the disputed claim terms to mean “include the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and

the state of the art.” Phillips, 415 F. 3d at 1314 (internal quotations and citations omitted).

In determining proper construction of claim terms, the Court should look to the words of the claims, both asserted and non-asserted, to define the scope of the patented invention.

Vitronics, 90 F. 3d at 1582. The claims also must be construed in a manner consistent with the specification. Phillips, 415 F. 3d at 1315. The specification is highly relevant, usually dispositive to the meaning of a disputed term. Vitronics, 90 F. 3d at 1582. “The pertinence of the specification to claim construction is reinforced by the manner in which a patent is issued.” Phillips, 415 F. 3d at 1316. The Patent and Trademark Office determines the scope of the claims of a patent by “giving claims their broadest reasonable construction ‘in light of the specification as it would be interpreted by one of ordinary skill in the art.’” Id. (quoting Am. Acad. of Sci. Tech. Ctr., 367 F. 3d 1359, 1364 (Fed. Cir. 2004)). A patentee also may choose to act as his own lexicographer and use terms in a manner other than their ordinary meaning. Vitronics, 90 F. 3d at 1582. To that end, the specification may reveal a special definition of a claim term that differs from the meaning it would ordinarily possess Id. In addition, “it is entirely appropriate for a court, when conducting claim construction, to rely heavily on the written description for guidance as to the meaning of the claims.” Id. “A construction that excludes a preferred embodiment ‘is rarely, if ever, correct.’” C.R. Bard, Inc. v. U.S. Surgical Corp., 388 F. 3d 858, 866 (Fed. Cir. 2004) (quoting Vitronics, 90 F. 3d at 1582). Finally, the Court may consider the prosecution history of the patent itself to assist it in its determination. Vitronics, 90 F. 3d at 1582.

Extrinsic evidence may always be considered to assist in an understanding of the underlying technology; provided, however, extrinsic evidence may never be used to vary or contradict the terms of a claim Interactive Gift Exp., Inc. v. CompuServe, Inc., 256 F. 3d 1323,

1332 (Fed. Cir. 2001). “Within the class of extrinsic evidence, technical dictionaries and treatises may be useful in claim construction.” Phillips, 415 F. 3d at 1318 (citing Renishaw PLC v. Marposs Societa’ per Azioni, 158 F. 3d 1243 (Fed. Cir. 1998)). In addition, “Extrinsic evidence in the form of expert testimony can be useful to a court for a variety of purposes, such as to provide background on the technology at issue, to explain how an invention works, to ensure that the court’s understanding of the technical aspects of the patent is consistent with that of a person of skill in the art, or to establish that a particular term in the patent or the prior art has a particular meaning in the pertinent field.” Id.

At the Markman hearing and in their briefs, the parties presented the claims, the specifications, the preferred embodiments, prosecution history, and expert proof to support their respective construction of the disputed claim terms.

The Court construes the disputed claim terms as follows:

1. FLEXIBLE SHEET MATERIAL.

Central to the dispute between the parties over the proper construction of the claim term “flexible sheet material” is whether the term encompasses a type of multi-layer non-woven material referred to as SMS. There is no dispute over the term “flexible”, as both parties agree that “flexible” means capable of being easily bent.

Nonwoven fabrics have been available since the early 1900's and can be made in a number of different ways (Docket No. 176, Declaration of Carl Palenske at 5). Nonwoven fabrics can be engineered to have a wide variety of properties (Docket No. 176, Declaration of Carl Palenske at 5). SMS is used in the industry to indicate a type of nonwoven material that is a type of composite material having excellent barrier protection properties as well as breathability.

The composite material of SMS is formed of different layers. Different polymers are used to make the different layers (Docket No. 176, Declaration of Carl Palenske at 7). The initials “SMS” are used in the industry to describe the layers that form this type of composite material, with the “S” identifying “spunbond” layers and the “M” standing for a “meltblown” sheet (Docket No. 176, Declaration of Carl Palenske at 7). Spunbonded and meltblown are common methods of producing nonwoven fabrics (Docket No. 176, Declaration of Carl Palenske at 5). Spunbond nonwovens are formed by starting with a raw polymer that is extruded through small holes in the spunbond equipment into long, thin, continuous fibers. The fibers are then drawn or stretched until they thin out to a desired diameter. The spunbond equipment then deposits the extruded fibers onto a moving conveyor belt and where they collect in the form of a web. (Docket No. 176, Declaration of Carl Palenske at 5). To make a meltblown nonwoven, polymers are extruded into a high velocity airstream after leaving a spinneret. Air scatters the molten strands randomly and solidifies them as they are deposited onto a moving conveyor belt (Docket No. 176, Declaration of Carl Palenske at 6).

In support of their construction, BBA and Cardinal argue that the ‘909 Patent describes two methods of making a single sheet of nonwoven material made of a single fiber type which by itself, and without any additional nonwoven layers such as the layers in SMS fabrics, has a high level of both liquid impermeability and air permeability. More specifically, BBA and Cardinal asserts that each method described in the ‘909 Patent creates a single sheet comprising a single web of fibers, and, thus, the term “flexible sheet material” cannot include a laminated multi-layer product such as SMS.

Dupont, on the other hand, asserts that the specification of the ‘909 Patent indicates that



the term “flexible sheet material” includes multi-layer sheet materials, including SMS fabrics. Dupont also asserts that this construction of the term is support by the extrinsic record.

The Court finds that the plain language of the ‘909 Patent indicates that it is directed at an improvement over nonwoven SMS fabric and does not encompass SMS fabric. Disputed Claim 64 of the ‘909 Patent discloses a “sheet material”, and Independent Claims 4 and 5 from which Claim 64 depends disclose a “flexible sheet material” (Docket No. 174, Ex. 1, Col. 10 at lines 42-57 and Col. 13 at lines 25-27). When read in light of the specification, it is apparent that the term “flexible sheet material” is an improved nonwoven structure composed of layers of fibers described as “meltspun” nonwoven fibers (Docket No. 174, Ex. 1, Col. 2, Lines 23 and 31).

The Background of the Invention provides some guidance as to the improved art of the ‘909 Patent. The Background of the Invention cites to composite or laminated products, such as SMS, as an example of prior art technology for making nonwoven fabrics (Docket No. 174, Ex. 1, Col. 1 at lines 45-49). The Background of the Invention indicates that prior art patents, U.S. Patent Nos. 4,622,259 and 4,908,163, are directed at attempts to make an improvement over SMS technology by making better melt-blown fibers with improved tensile properties (Docket No. 174, Ex. 1, Col. 1 at lines 60-64). The Background of the Invention also states that it is an object of the present invention to provide a further improved nonwoven structure that has a balance of properties that are better suited to barrier end uses, i.e., more substantial barrier and breathability properties compared to currently known barrier materials (Docket No. 174, Ex. 1, Col 1 at line 65-67 and Col. 2 at lines 1-4). Thus, the Background of the Invention makes clear that the invention of the ‘909 Patent is directed toward an improvement over the meltblown

fibers of prior art.

The Summary of the Invention further clarifies the object of the invention of the '909 Patent. The Summary of the Invention reflects that the invention "comprises a flexible sheet material comprised of meltspun nonwoven fibers" ... "wherein substantially all of the fibers are continuous meltspun fibers" (Docket No. 174, Ex. 1, Col. 2 at lines 22-31). Thus, the Summary of the Invention indicates that the improved art of the '909 Patent is a single sheet material referred to as "meltspun nonwoven fibers", and not a composite product.

The Detailed Description of the Preferred Embodiments further describes the fiber of the inventive fabric as "a small denier poly-metic fiber which forms numerous, but very small pores." (Docket No. 174, Ex. 1, Col. 3 at lines 57-59). The Detailed Description is careful to state that "putting small denier fiber in a fabric to obtain high barrier is generally known in the art and is not new." The Detailed Description indicates that what is new about the subject invention is the use of hard yarn "meltspun" microfibers which when used to create a nonwoven fibrous structure, result in a fabric which has an extraordinarily high Frazier permeability and sufficient strength to form a barrier fabric without the need for any type of supporting scrim (Docket No. 174, Ex. 1, Col. 3 at lines 60-64 and 65-67 and Col. 4 at line 1). The Detailed Description is also careful to disclaim application of SMS fabric to the present invention. The Detailed Description states that "the fiber strength of the present invention will accommodate most applications without reinforcement such as the meltblown layer in SMS." (Docket No. 174, Ex. 1, Col. 5 at 62-64). Thus, the Detailed Description indicates that the '909 Patent improves on attempts of prior art to increase the strength of a single sheet of nonwoven fabric.

This interpretation of the claimed invention as a single fiber sheet material is further

supported by the Detailed Description wherein an advantage of the present invention is described as the creation of a material which is recyclable as constituted of a single polymer as opposed to other materials which are combinations of dissimilar polymers (Docket No. 174, Ex. 1, Col 9 at lines 24-30). While this embodiment is only one of several, there is nothing in the language of the claims or the specification to indicate that the invention covers a non-woven material comprised of several different fibers as asserted by Dupont. Although in Claim 25 of the '909 Patent the sheet material of Claims 4 and 5 is referred to as sheet material "comprised of fibers, and at least a portion of the fibers are formed of at least two separate component polymers," it is clear from the specifications that the use of separate component polymers in Claim 25 does not describe a sheet material composed of separate layers of fibers formed from different polymers (Docket No. 174, Ex. 1 Col. 11 at lines 54-57). Rather, the specification makes clear that reference to component polymers means bi-component or multi-component fibers with sheath/core arrangements or blends composed of a variety of polymers or co-polymers (Docket No. 174, Ex. 1 Co. 6 at lines 24-29, Col. 9 at lines 47-67, Col. 10 at lines 1-33 and Col. 11 at lines 54-57).

Thus, the Court finds that the term "flexible sheet material" when read in light of the specifications, does not cover SMS fabrics. Such a finding is apparent from the invention of the '909 Patent as consistently described throughout the specification as a single sheet material composed of "meltspun" nonwoven fibers. Accordingly, the Court construes the term "Flexible Sheet Material" as "a single sheet of material that is easily bent composed of non woven meltspun fibers."

## 2. FRAZIER PERMEABILITY.

The parties also dispute whether the term “Frazier permeability” as found in Claims 4 and 5 is indefinite. “Frazier permeability” refers to an air permeability test or the measure of the air permeability of the fabric at issue (Docket No. 176 at 11, Docket No. 324 at 9). Dupont argues that the law does not require the ‘909 Patent to specify a particular standard for measuring “Frazier permeability” so long as a person of ordinary skill in the art would know which standard to use. Dupont further argues that a person of ordinary skill in the art in 1999 would use the ASTM D737 or IST 70.1 test methods to measure “Frazier permeability”. BBA and Cardinal, on the other hand, assert that reference to “Frazier” in the claims does not identify a test method by which the measurement can be made or a test instrument with which to take the test.

A determination of indefiniteness is a matter of law for the Court as part of the claims construction process. Howmedica Osteonics Corp. v. Tranquil Prospects, Ltd., 401 F. 3d 1367, 1371 (Fed. Cir. 2005) (citing 35 U.S.C. §112, para.2 (1982)). A determination of indefiniteness depends on whether “one skilled in the art would understand the bounds of the claim when read in light of the specification.” Id. “The perspective of a person of ordinary skill in the art at the time of the patent application governs the definiteness analysis.” Id. (citing W.L. Gore & Assocs. Inc. v. Garlock, Inc., 721 F. 2d 1540, 1556-57 (Fed. Cir. 1983)). A patent claim is indefinite if “its legal scope is not clear enough that a person of ordinary skill in the art could determine whether a particular [product of method] infringes or not.” Id. (citing Geneva Pharms., Inc. v. Glaxosmithkline PLC, 349 F. 3d 1373, 1384 (Fed. Cir. 2003)). A claim term is indefinite “only if the claim is insolubly ambiguous and no narrowing construction can properly be adopted.” Honeywell Int’l, Inc. v ITC, 341 F. 3d 1332, 1338-1339 (Fed. Cir. 2003) (internal quotations and citations omitted)).

In the present case, the evidence before the Court indicates that the test method for determining “Frazier permeability” can be determined with reference to prior art. Prior art can often help demonstrate how a disputed term is used by those skilled in the art. Vitronics, 90 F. 3d at 1584 (A court in its discretion may admit and rely on prior art proffered by one of the parties, whether or not cited in the specification or the file history, to demonstrate how a disputed term is used by those skilled in the art.) This is especially appropriate, where, as in the present case, five of the patents identified in the prosecution history of the ‘909 Patent, U.S. Patent Nos. 4,622,259, 4,908,163, 4,442,161, 4,499,139, and 5,308,691, define “Frazier permeability”, and a stated object of the invention is to provide a further improvement of two of the so identified patents. In all of the cited prior art references, “Frazier permeability” is defined with reference to test standards ASTM D737 and IST 70.1 (Docket No. 174, Ex. 2 at p. 89, Col. 3, lines 63-68; p. 100, Col. 3, lines 64-67; p. 114, Col. 6, lines 44-46; p. 123, Col. 5, lines 14-18; p. 133, Col. 5, line 16). Furthermore, the expert witness proof presented in the case supports construction of the term “Frazier permeability” with reference to tests conducted pursuant to either ASTM D737 or IST 70.1 (Docket No.174. Ex. 4 at 63-64. Ex. 5 at 115-16, 158, and Docket No. 173 at 6). Finally, with respect to BBA and Cardinal’s arguments that the term “Frazier permeability” is indefinite because there are a number of different test instruments that can measure “Frazier permeability”, the evidence before the Court shows that the standards identified by Dupont do not require the use of a particular instrument (Docket No. 173 at 7). Accordingly, the Court construes the term “Frazier permeability” as “a measurement of the ease with which air passes through material (based upon the rate of flow of air per unit area of fabric) at a specified pressure drop, typically performed according to ASTM D737 and IST 70.1.”

### 3. HYDROSTATIC HEAD.

Similarly, the parties dispute construction of the term “Hydrostatic Head”. Dupont argues the term is capable of construction with reference to industry standards, and BBA and Cardinal argue that the term is indefinite for failure to identify a test method and a test instrument. Again, the Court finds that the term “Hydrostatic Head” can be defined with reference to the prior art identified in the prosecution history of the ‘909 Patent. A number of prior art patents found in the prosecution history of the ‘909 Patent refer to the test for “Hydrostatic Head” as conducted pursuant to test standard AATCC 127 (Docket No. 173 at 8). In addition, the proof of the expert witnesses presented by Dupont support a definition of “Hydrostatic Head” in line with the testing methods contained in the prior art references. Similarly, as with BBA’s and Cardinal’s argument that the term is indefinite because there are a number of different test instruments available to measure “Hydrostatic Head”, the proof before the Court indicates that it is the test method chosen and not the equipment used which determines whether a piece of fabric falls within the claims of the ‘909 Patent (Docket No. 176, Declaration of Palenske at 11). Accordingly, the Court construes the term “Hydrostatic Head” to mean “a measurement of the resistance of fabrics to the penetration of water under hydrostatic pressure, typically performed according to AATCC 127, IST 80.4, and IST 80.6.”

### 4. AT LEAST ABOUT.

The parties also dispute construction of the claim term “at least about”. BBA and Cardinal assert that this term is insolubly ambiguous. In the alternative, BBA and Cardinal offer a construction of the term “at least about 15” as meaning “at least 14.95”, “at least about 80” as meaning “at least 79.95”, and “at least about 85” as meaning “at least about 84.95”. Dupont does

not oppose BBA's and Cardinal's alternative proposed construction of "at least about".

Under Federal Circuit precedent, the ordinary meaning of the term "about" has been found to mean "approximately" or with some approach to exactness in quantity, number or time. Merck & Co., Inc. v. Teva Pharms, USA, Inc., 395 F. 3d 1364, 1369-70 (Fed. Cir. 2005); Conopco, Inc. v. May Dep't Stores Co., 46 F. 3d 1556, 1561 (Fed. Cir. 1994). In addition, the relevant dictionary definition of the term "about" indicates that the common usage of the term means "approximately", "almost" or "nearly". Webster's Third New International Dictionary, 5 (1993). There is nothing in the written description of the '909 Patent or the claim terms themselves to indicate that the patentee of the '909 Patent intended to redefine or use the term "at least about" differently from its ordinary meaning. The patentee uses the term "about" to reasonably describe the test results for "Frazier Permeability" and "Hydrostatic Head" in relationship to a specific numerical result. Given the use of the term "about" consistent with Federal circuit precedent and the common usage dictionary definition, and the parties agreement over the alternative construction advanced by BBA and Cardinal, the Court construes the term "at least about" to mean "at least .05 below the claimed number."

##### 5. CROSS SECTIONAL VOID PERCENTAGE.

Finally, the parties dispute whether the term "cross sectional void percentage" is indefinite or whether the term is capable of construction. Dupont argues that the concept of measuring void percentage in fabric is well known to one of skill in the art. More specifically, Dupont asserts that cross sectional void percentage is a measurement of the porosity of a fabric by looking at the volume of "voids" (lack of fabric) compared to the volume of the entire fabric. Dupont also asserts that the language "cross sectional" merely refers to the fact that the void

percentage of a cross-section of fabric is being analyzed, versus the entire fabric. BBA and Cardinal, on the other hand, assert that while the parties agree about what the plain language of the term “cross sectional void percentage” means, the term has no meaning in the field. In addition, BBA and Cardinal argue that there are no published test methods for determining “cross sectional void percentage” and a person of ordinary skill in the art would not know whether to include the “bond points” of the fabric when calculating “cross sectional void percentage”. Furthermore, BBA and Cardinal argue there is no test method for determining the term “void percentage” by itself.

The Court finds that while BBA and Cardinal may be correct in their assertion that there is no published method for determining cross sectional void percentage, this is not conclusive of whether the term is capable of construction. The ‘909 Patent itself supplies various examples of the subject invention reflecting values for void percentage thus giving one skilled in the art instruction on how to calculate void percentage (Docket No. 174, Ex. 1, Col. 6 at lines 39-66). In addition, the expert proof presented by Dupont indicates that measuring void percentage is well known to one of skill in the art and is merely a calculation that can be performed based upon measurements and data, such as the thickness of the fabric and the density of the material (Docket No. 173 at 10, Docket No. 174, Ex. 4 at 346-349). This expert proof also indicates that a person of ordinary skill in the art would know how to calculate cross-sectional void percentage from the examples of data set forth in the ‘909 Patent which shows percentage voids in relationship to the basis weight, thickness and density of various nonwoven samples, and that a person of ordinary skill in the art would understand that bond points in nonwoven fabrics are irrelevant to the calculation (Docket No. 325, Ex. A and E). There has been no showing that this



expert proof contradicts or does not support the examples of void percentage reflected in the '909 Patent. Furthermore, additional support is given to Dupont's proposed construction given the plain meaning of the term "cross section" which by its relevant general purpose definition means "a cutting or section across; a section at right angles to especially the longer axis of anything; a piece of something cut off in a direction at right angles to an axis." Webster's Third New International Dictionary, 543 (1993). Finally, the parties agreement over the plain meaning of the term militates against a finding that the term is insolubly ambiguous.

Thus, the Court declines to find the claim term "cross sectional void percentage" insolubly ambiguous. Accordingly, the Court construes the term "cross sectional void percentage" as meaning, "a measure of the porosity of a cross section (i.e., a cutting or piece cut off at right angles to an axis) of the material, equal to the volume of voids (or air space) in the cross section of the material structure divided by the total volume of the cross section of the material and multiplied by 100."

IT IS SO ORDERED.

A handwritten signature in black ink, reading "Todd Campbell". The signature is fluid and cursive, with the first name "Todd" and last name "Campbell" clearly distinguishable.

TODD J. CAMPBELL  
UNITED STATES DISTRICT JUDGE